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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,987	02/21/2006	Dietmar Rakutt	05-180	3235
34704 7590 12/09/2009 BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510				
EXAMINER				
THOMAS, ALEXANDER S				
ART UNIT		PAPER NUMBER		
1794				
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12/09/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/524,987

Applicant(s)

RAKUTT ET AL.

Examiner

Alexander Thomas

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-31, 41 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-31, 41 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 22-31 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tusim 6,213,540 in view of Noel 4,755,408. Tusim discloses a structural element comprising a plurality of stretched (column 7, lines 47-54) closed-cell thermoplastic foam (column 5, lines 31-35) segments 54 arranged next to each other, said segments welded together at abutting faces forming weld seams 52 that are pore-free (column 8, lines 27-52) and that intersect to form a network of seams (Figure 6). However, Tusim does not disclose cutting his composite block of material 50 to form a sheet-shaped product. Tusim does disclose that his foam products may be formed into any desired shape depending on the end use (column 11, lines 37-43). Noel discloses a similar extruded foam structural element that may be cut to form panel-shaped products of any desired thickness; see Figure 48, column 6, lines 44-49 and column 10, lines 56-68. It would have been obvious to one of ordinary skill in the art to cut off a short section of the extruded composite of the primary reference in view of the teachings of the secondary reference in order to form a panel shaped product if the end use necessitated a panel-shaped structure. Concerning claim 23, Tusim does not disclose the particular claimed foam material. It would have been obvious to one of ordinary skill in the art to use any well-known thermoplastic material, such as PET or SAN, as the foam material in the Tusim's product since it has been held to be within the general skill

of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Concerning claim 31, Tusim discloses that his foam products may be formed into any desired shape depending on the end use (column 11, lines 37-43). Therefore, it would have been obvious to one of ordinary skill in the art to form the composite of Figure 6 in Tusim in a flat sheet-shape since a change in shape is generally recognized as being within the level of ordinary skill in the art.

3. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tusim in view of Noel as applied to claims 22-31 and 42 above, and further in view of either DE 19715529 or Delorme 3,841,958. The combined prior art of Tusim and Noel does not teach offsetting the joints between the foam segments. DE 19715529 and Delorme 3,841,958 each disclose offsetting the joint lines in foam composites; see Figures 3-6 of DE 19715529, and Figures 15-16 and column 7, lines 40-50 of Delorme. It would have been obvious to one of ordinary skill in the art to offset the joint lines in the product of the combined prior art in view of the teachings in DE 19715529 or Delorme 3,841,958 to provide a stronger panel more resistant to non-perpendicular or horizontal loads.

Response to Arguments

4. Applicant argues that to cut the embodiment of Tusim discussed at column 6, lines 11-25 in a manner as suggested in Noel would orient the increased strength away from a direction of expected impact in Tusim and thus the combination of references is not proper. However, this argument is not convincing. The above prior art rejection relies on a different embodiment than that used in applicant arguments, namely the

embodiment set forth in Figure 6 and at column 8, lines 27-52. In this embodiment, Tusim describes how the increased strength of the composite is located in a direction aligned with the planes of the non-foam layers 52 (applicant's weld seams); see column 8, lines 46-52. Thus, cutting the Tusim composite as done in Noel (Noel cuts his composite in a direction perpendicular to the planes of his non-foam layers) will not result in increased strength in a direction away from expected impact, assuming the expected impact is in a direction of anisotropic strength in the composite of Tusim. Applicant also argues that since the Noel structure has holes it would not be obvious to combine the two references. This is not convincing since the rejection does not suggest using the Noel product in place of the product of Tusim, it merely suggests using a process step taught in Noel to modify the composite in Tusim.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Thomas whose telephone number is 571-272-1502. The examiner can normally be reached on 6:30-4:00 M-THUR.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Thomas/
Primary Examiner
Art Unit 1794